Remarks

Claims 1-24 were pending prior to this response. Claims 1-5 and 15-24 were rejected. Claims 6-14 were objected to. Claims 1, 3, 5-15, 18, 19, 21, and 23 have been amended herein. Claims 4, 17, and 22 have been cancelled herein. Claims 25-36 have been added and do not add any new matter to the application. Claims 25-36 represent the objected to claims rewritten in independent form.

I. Rejection of Claims 1-3 Under 35 U.S.C. §102(e)

Claims 1-5 and 15-24 were rejected under 35 U.S.C. §102(e) as being anticipated Altunbasak et al. (U.S. 6,597,816). Claim 1 was amended to include the elements of claim 4. Claims 2 and 3 are dependent on claim 1. Therefore, the rejections of claims 1-3 are moot.

II. Rejection of Claims 1-5 and 15-24 Under 35 U.S.C. §102(e)

Claims 1-5 and 15-24 were rejected under 35 U.S.C. §102(e) as being anticipated by Kumar et al. (U.S. 6,173,087).

CLAIM 1

Claim 1, as amended herein, is restated as follows:

A method for generating an electronic version of a document, the method comprising:

receiving a plurality of digital, electronic images of the document;

generating a corrected image from each received image;

deriving one or more motion parameters for each pair of consecutive, corrected images, the motion parameters indicating the relative motion

between the consecutive, corrected images, **the motion parameters are derived by minimizing the sum of squares differences between each pair of consecutive images**;

aligning each image relative to the previous images based on the derived motion parameters; and

blending each image into the previous images so as to produce the electronic version of the document.

Some portions of claim 1 that are not disclosed by Kumar have been replicated above in bold type. The applicants note that claim 1 has been amended to incorporate elements of claim 4, which are restated above in bold type. Claim 4 has been cancelled herein.

According to the office action, Kumar discloses minimizing a sum of squares differences between each pair of consecutive images (column 4, line 64 through column 5, line 30). As described in greater detail, the applicants contend that Kumar does not disclose deriving motion parameters by minimizing sum of squares differences as claimed in claim 1.

The section of Kumar (and the formulas) cited by the office action relates to overcoming lens distortions, not to deriving motion parameters as claimed. The applicants note that the portion of the specification prior to the cited portion describes the lens distortions. For example, reference is made to column 3, lines 35-46 which describe models of a parametric plane projective transformation with lens distortion, not motion parameters as claimed. In addition, the cited portion of the specification discloses lens distortions, not deriving movement parameters as claimed.

Based on the foregoing, the rejection of claim 1 has been overcome. The applicants request reconsideration of the rejection.

Claims 2, 3, and 5

Claims 2, 3, and 5 are dependent on claim 1 and are deemed allowable by way of their dependence and for other reasons. Therefore, the applicants request reconsideration of the rejections.

CLAIM 15

Claim 15 is independent and is restated as amended herein:

A system for generating an electronic version of a document, the system comprising:

an image correction engine configured to receive a plurality of digital, electronic images of the document and to generate a corrected image from each received image;

at least one motion estimation engine configured to compare consecutive, corrected images and to derive for each pair of consecutive corrected images one or more motion parameters defining the relative motion between the respective images **by minimizing a sum of squares differences between each pair of consecutive images**; and

at least one alignment and blending image configured to use the derived motion parameters to align and blend consecutive images to produce the electronic version of the document.

Claim 15 was rejected on the same grounds as claim 1. Therefore, the applicants incorporate the rebuttal to the rejection of claim 1 into this rebuttal.

Claim 15, as with claim 1, recites deriving motion parameters, in part, by minimizing a sum of squares of differences between pairs of consecutive images. As set forth above, Kumar does not disclose deriving motion parameters. Thus, Kumar cannot disclose all the elements of claim 15 and cannot anticipate claim 15.

Based on the foregoing, the applicants request reconsideration of the rejection.

CLAIMS 16, 18-20

Claims 16 and 18-20 are dependent on claim 15 and are deemed allowable by way of their dependence and for other reasons. Therefore, the applicants request reconsideration of the rejections.

Claim 21

Claim 21 is independent and is restated as follows:

A computer system for use in scanning a document, the computer system comprising:

a base;

a display panel pivotally attached to the base;

a digital camera mounted to the display panel;

an image correction engine configured to receive a plurality of images of the document from the digital camera, and further configured to generate a corrected image from each received image;

at least one motion estimation engine configured to compare consecutive, corrected images and to derive for each pair of consecutive corrected images one or more motion parameters defining the relative motion between the respective images **by minimizing a sum of squares differences between each pair or consecutive images**; and

at least one alignment and blending image configured to use the derived motion parameters to align and blend consecutive images to produce a canned image of the entire document.

Claim 21 was rejected on the same grounds as claim 1. Therefore, the applicants incorporate the rebuttal to the rejection of claim 1 into this rebuttal.

Claim 21, as with claim 1, recite deriving motion parameters, in part, by minimizing a sum of squares of differences between pairs of consecutive images. As set forth above, Kumar does not disclose deriving motion parameters. Thus, Kumar cannot disclose all the elements of claim 21 and cannot anticipate claim 21.

Based on the foregoing, the applicants request reconsideration of the rejections.

CLAIMS 23 AND 24

Claims 23 and 24 are dependent on claim 21 and are deemed allowable by way of their dependence and for other reasons. Therefore, the applicants request reconsideration of the rejections.

III. New Claims

Claims 25-36 have been added herein. Claim 25, which is independent, is based on the original claim 13, which was objected to as being dependent on a rejected base claim. Claim 13 has been rewritten in independent form as new claim 25 and is deemed allowable. The remaining new claims depend on claim 25 and are deemed allowable by way of their dependence and for other reasons.

In view of the above, all of the pending claims are now believed to be in condition for allowance and a notice to that effect is earnestly solicited.

Respectfully submitted,
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